

In The Claims:

1. (Currently Amended) A pre-crash sensing and countermeasure deployment control system for an automotive vehicle coupled to a countermeasure system having an external airbag system, said pre-crash sensing system and countermeasure deployment comprising:

an object classifier generating an object classification signal, the object classifier comprises a radar or lidar unit generating an object distance signal and object relative velocity signal and a vision system generating the object classification signal that comprises object sizes including object area and object height; and

a controller coupled to said object classifier for varying an inflation rate of the external airbag in response to said object classification signal, object distance signal, and the object relative velocity signal.

2. (Cancel)

3. (Currently Amended) A system as recited in claim [[2]] 1 wherein said object classification comprises classifying collision objects into pedestrian and non-pedestrian objects.

4. (Cancel)

5. (Currently Amended) A system as recited in claim [[2]] 1 further comprising a vehicle speed sensor generating a longitudinal speed signal corresponding to the longitudinal speed of the vehicle; wherein said controller activates said external airbag in response to the longitudinal speed signal.

6. (Currently Amended) A system as recited in claim [[2]] 1 further comprising a decision zone; wherein said radar or lidar sensor generates an object distance and relative velocity signals from an object within said decision zone and said vision sensor confirms the presence of the object within the said decision zone.

7. (Previously Presented) A system as recited in claim 1 wherein varying the activation rate comprises varying the activation rate from a high rate to a low rate.

8. (Previously Presented) A system as recited in claim 7 wherein the low rate corresponds to an object classification of a pedestrian.

9. (Previously Presented) A system as recited in claim 7 wherein the high rate corresponds to an object classification of a second vehicle.

10. (Original) A system as recited in claim 1 wherein the external airbag system comprises a bumper bag.

11. (Original) A system as recited in claim 1 wherein the external airbag system comprises a grill bag.

12. (Original) A system as recited in claim 1 wherein the external airbag system comprises a bumper bag and a grill bag.

13. (Currently Amended) A method for operating a pre-crash sensing and countermeasure deployment control system for an automotive vehicle having an external airbag system, said method comprising:

establishing a decision zone relative to the vehicle;

detecting an object within the decision zone;

classifying the object into an object classification by determining object sizes including object area and object height;

determining an external airbag inflation rate corresponding to the object classification; and

activating the external airbag system at the inflation rate.

14. (Previously Presented) A method as recited in claim 13 wherein determining comprises choosing between a low inflation rate and a high inflation rate.

15. (Previously Presented) A method as recited in claim 13 wherein the low inflation rate corresponds to a pedestrian classification.

16. (Previously Presented) A method as recited in claim 13 wherein the high inflation rate corresponds to a vehicle classification.

17. (Previously Presented) A method as recited in claim 13 wherein activating the external airbag system at the inflation rate comprises activating a grill airbag.

18. (Previously Presented) A method as recited in claim 13 wherein activating the external airbag system at the inflation rate comprises activating a bumper airbag.

19. (Currently Amended) A method for operating a pre-crash sensing and countermeasure deployment control system for an automotive vehicle having an external airbag system, said method comprising:

detecting an object;

classifying the object by determining object sizes including object area and object height;

when the object is a pedestrian, activating an external airbag of the external airbag system at a first inflation rate;

when the object is a second vehicle, activating the external airbag system at a second inflation rate greater than the first inflation rate.

20. (Original) A method as recited in claim 19 wherein the second rate corresponds to object size.